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Daisuke Sasaki

3828

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7590

05/22/2009

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EXAMINER

GEBREMICHAEL, BRUK A

ART UNIT

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/591,013	Applicant(s) SASAKI, DAISUKE	
	Examiner BRUK A. GEBREMICHAEL	Art Unit 3715	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 March 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 6-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 6-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 03/23/2009 has been entered.
2. Currently, claims 1-5 are canceled. New claims 6-10 are added. Therefore, claims 6-10 are pending in this application.

Response to Amendment

3. Applicant has canceled claims 1-5. This is sufficient to overcome the 35 U.S.C. 112, second paragraph rejection set forth in the previous office action. Accordingly, the Examiner withdraws the rejection.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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- Claims 6-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Saita 6,719,565 in view of Hamburg 6,028,583, in view of Fertig 2004/0239689, and further in view of Alpher 5,552,805.

Regarding claim 6, Saita discloses the following claimed limitations; a hair color simulation system for simulating a hair coloring procedure (col.2, lines 5-11), the hair color simulation system comprising a display section having a predetermined display area, a base screen displaying section displaying a base screen on the predetermined display area of the display section (FIG 2, label 4 and FIG 3); a hair color data storage section recording RGB values of original hair colors to be subjected to hair coloring (col.3, lines 1-11); a first hair line data storage section recording image data of a first hair line (col.2, lines 54-58); a first input section for receiving an input of a choice of one hair color from the original hair colors recorded in the hair color data storage section (col.4, lines 29-32); a first image displaying section displaying the first hair line with a predetermined transparency on the first layer of the base screen according to the image data recorded in the first hair line data storage section (FIG 2, label 4).

Saita does not explicitly disclose, the base screen comprising a first layer, an intermediate layer, a second layer, a third layer, a fourth layer, and a fifth layer; a hair color preparation data storage section recording RGB values of hair colors of hair color preparations; a second hair line data storage section recording image data of a second hair line which is different in line pattern and color from the first hair line recorded in the first hair line data storage section; a second input section for receiving an input of choices of two hair color preparations from the hair color preparations recorded in the

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hair color preparation data storage section and of a mixing ratio of the selected two hair color preparations; a second image displaying section retrieving the RGB values of the selected hair color from the hair color data storage section and displaying the selected hair color without transparency on the fifth layer of the base screen based on the input received at the first input section; a fifth image data displaying section displaying the second hair line with a predetermined transparency on the intermediate layer of the base screen according to the image data recorded in the second hair line data storage section; a third image displaying section retrieving the RGB values of the selected two hair color preparations from the hair color preparation data storage section and displaying the colors of the selected two hair color preparations with respective transparencies corresponding to the selected mixing ratio thereof on the third layer and the fourth layer of the base screen respectively based on the input received at the second input section; a fourth image displaying section retrieving the RGB values of the selected hair color from the hair color data storage section and displaying the selected hair color with a predetermined transparency on the second layer of the base screen based on the input received at the first input section; and wherein the first layer, the intermediate layer, the second layer, the third layer, the fourth layer, and the fifth layer of the base screen are superimposed on one another so as to display a resultant simulated hair color that is produced when the first hair line, the second hair line, the colors of the hair color preparations and the original hair color are displayed on the base screen with the respective transparencies and superimposed on each other.

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However, Hamburg discloses an invention for utilizing layers in image manipulation that teaches, a base screen comprising a first layer, an intermediate layer, a second layer, a third layer, a fourth layer, and a fifth layer (see FIG 6 and col.3, lines 65-67).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the invention of Saita in view of Hamburg by incorporating a layering technique that utilizes image stacks with multiple layers in order to combine the color of each pixel in the different layers there by generating the required composited color, since such layer manipulation method gives flexibility for adjusting the transparency information required for the desired color; and also helps the user to blend any number of colors as required by reusing formerly generated colors thereby increasing the efficiency of the system.

Saita in view of Hamburg does not explicitly teach the following claimed limitations that are taught by Fertig; a hair color data storage section recording RGB values of original hair colors to be subjected to hair coloring (Para.0020, lines 4-7) a hair color preparation data storage section recording RGB values of hair colors of hair color preparations (Para.0013, lines 12-16); a second hair line data storage section recording image data of a second hair line which is different in line pattern and color from the first hair line recorded in the first hair line data storage section (Para.0013, lines 4-12); a second input section for receiving an input of choices of two hair color preparations from the hair color preparations recorded in the hair color preparation data storage section (see Para.0017, lines 3-11); a second image displaying section retrieving the RGB

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values of the selected hair color from the hair color data storage section and displaying the selected hair color without transparency on the fifth layer of the base screen based on the input received at the first input section (FIG 3, label 47); a fifth image data displaying section displaying the second hair line with a predetermined transparency on the intermediate layer of the base screen according to the image data recorded in the second hair line data storage section (Para.0013, lines 1-20).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the invention of Saita in view of Hamburg and further in view Fertig by configuring the computer display to have multiple windows in order to display the colors to be selected in one pane, and the hair of the subject in a different pane so that the user would easily observe his/her hair image while choosing the preferred color combinations.

Note that the limitation with regard to “a second hair line data storage section” is implicitly taught by Fertig since one of ordinary skill in the art would readily recognize the fact from the teaching of the prior art that the computer system stores the first image and the second image separately before displaying or performing any color alteration.

Saita in view of Hamburg and further in view Fertig does not explicitly teach the following claimed limitations; a third image displaying section retrieving the RGB values of the selected two hair color preparations from the hair color preparation data storage section and displaying the colors of the selected two hair color preparations with respective transparencies corresponding to the selected mixing ratio thereof on the third layer and the fourth layer of the base screen respectively based on the input received at

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the second input section; a fourth image displaying section retrieving the RGB values of the selected hair color from the hair color data storage section and displaying the selected hair color with a predetermined transparency on the second layer of the base screen based on the input received at the first input section.

However, Alpher discloses a method and system for displaying blended colors in which different color preparations are mixed based on a mixing ratio of the selected two color preparations (col.1, lines 5-14), a third image displaying section retrieving the RGB values of the selected two hair color preparations from the hair color preparation data storage section and displaying the colors of the selected two hair color preparations with respective transparencies corresponding to the selected mixing ratio thereof on the third layer and the fourth layer of the base screen respectively based on the input received at the second input section (FIG 3A, label 3) ; a fourth image displaying section retrieving the RGB values of the selected hair color from the hair color data storage section and displaying the selected hair color with a predetermined transparency on the second layer of the base screen based on the input received at the first input section (e.g. see FIG 3A, label 5).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the invention of Saita in view of Hamburg, in view Fertig and further in view of Alpher in order to selectively blend two or more colors by adjusting the percentage contribution (i.e. mixing ratio) of each base colors for example using a pointing device such as mouse (Alpher col.4, lines 26-33) until the desired color is achieved, thereby making the blending operation user-friendly and very

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efficient so that the user would easily blend any type of colors to get a given desired result.

Hamburg further teaches, the first layer, the intermediate layer, the second layer, the third layer, the fourth layer, and the fifth layer of the base screen are superimposed on one another so as to display a resultant simulated hair color that is produced when the first hair line, the second hair line, the colors of the hair color preparations and the original hair color are displayed on the base screen with the respective transparencies and superimposed on each other (col.4, lines 34-49 and lines 60-65), whereby an actual hair color, which results from dyeing hair that has the selected hair color with a mixture of the selected two hair color preparations in the selected mixture ratio, is simulated.

Therefore, here also it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the invention of Saita in view of Hamburg in view of Fertig and further in view of Alpher by incorporating the layering technique taught by Hamburg in order to combine the color of each pixel in the different layers and then generate the required composited color, since such layer manipulation method gives flexibility for adjusting the transparency information required for the desired color; and also helps the user to blend any number of colors as required by reusing formerly generated colors, thereby increasing the efficiency of the system

Saita in view of Hamburg in view of Fertig and further in view of Alpher teaches the claimed limitations as discussed above.

Regarding claims 7 and 8, Alpher further teaches, the third image displaying section displays deeper colors of the selected two hair color preparations than the

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colors originally selected from the hair color preparation data storage section with the predetermined RGB values and with the transparency corresponding to the selected mixing ratio thereof (FIG 3A, label 3); the third image displaying section displays the color of one of the selected two hair color preparations on the third layer with a transparency which is lower than the transparency determined by the selected mixing ratio and the color of the other of the selected two hair color preparations on the fourth layer with a transparency which is higher than the transparency determined by the selected mixing ratio (col.3, lines 15-19 and col.4, lines 10-17).

Therefore, as already discussed above, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the invention of Saita in view of Hamburg, in view Fertig and further in view of Alpher in order to selectively blend two or more colors by adjusting the percentage contribution (i.e. mixing ratio) of each base colors for example using a pointing device such as mouse (Alpher col.4, lines 26-33) until the desired color is achieved, thereby making the blending operation user-friendly and very efficient so that the user would easily blend any type of colors to get a given desired result.

Regarding claim 9, Saita in view of Hamburg, in view Fertig and further in view of Alpher teaches the claimed limitations as discussed above.

Saita further discloses, the display area of the display section represents head hair of a model's face displayed by the display section (FIG 3).

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- Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Saita 6,719,565 in view of Hamburg 6,028,583, in view of Fertig 2004/0239689, in view of Alpher 5,552,805 and further in view of Lei 2002/0054039.

Regarding claim 10, Saita in view of Hamburg, in view Fertig and further in view of Alpher teaches the claimed limitations as discussed above.

Saita in view of Hamburg, in view Fertig and further in view of Alpher does not explicitly teach, the line pattern and the color of the second hair line are selected so that each hair image is three-dimensionally displayed on the base screen to provide a more realistic display.

However, Lei discloses a head modeling invention that teaches, the line pattern and the color of the second hair line are selected so that each hair image is three-dimensionally displayed on the base screen to provide a more realistic display (Para.0015 and Para.0016).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the invention of Saita in view of Hamburg, in view Fertig, in view of Alpher and further in view of Lei by incorporating a three-dimensional processing technique (Lei FIG 3, step S4) in order to generate an image that looks like the subject's natural image (Lei Para.0026, lines 11-14) so that the user would have an accurate judgment of his/her look before he/she accepts the actual procedure, thereby giving the customer a chance to make a well informed decision.

Response to Arguments.

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5. Applicant's arguments filed on 03/23/2009 have been fully considered. In the remarks,

(1) Applicant indicated that section A describing the scope and content of Saita, Hamburg, Fertig and Yoshio U.S. patents that appears on pages 8-14 of the amendment filed on October 24, 2008 will not be repeated here. Reference is made to that section and the contents of section A of the previous amendment are included here by reference thereto.

- In response to argument (1), the Examiner has already provided detail explanation regarding the teachings of Saita, Hamburg, Fertig and Yoshio references as presented in the previous office action (Final Office Action mailed on 01/23/2009) as a response to Applicant's argument filed on (10/24/2008). Please refer to the Final Office Action for detail regarding Applicant's section A of previous argument.

(2) Applicant argues that Hamburg discloses a general method of compositing an ordered set of image layers to provide a combined impression or effect or final image. However, Hamburg does not limit the content of the image layers or disclose that the layers have image of hair, hair colors, or of an individual's head or hairstyle. . . Hamburg suggests a generic method for combining images with different colors and other characteristics but does not disclose or suggest combining the layers including the five specific images according to Applicant's new claim 6. A broad generic disclosure does not necessarily make a more limited species obvious (MPEP 2144.08) . . .

- In response to argument (2), the Examiner respectfully disagrees. The teaching of Hamburg does not have to be described in terms of hair coloring in order to qualify as

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a prior art. As already presented in the previous office action, a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir.1992). Thus, in the instant case, Applicant is concerned with implementing a layering technique to mix hair colors in a computer simulation. Hamburg discloses an invention that teaches a layering technique to mix colors using computer-generated images.

For example the line, "**Implementations of the invention** may include the following. The **compound layer effect** may comprise **positionally varying opacity information or dynamic data**, and may be represented by a pixel array or analytically. The **compound layer effect** may comprise a global opacity or **a color blending effect**, particularly if the color blending effect satisfies the property that $T(c,c)=c$, where T represents the transfer function of the color blending effect and c represents a color." (col.2, lines 54-62) introduces that Hamburg's invention is directed to a computer-generated color blending (mixing) technique that utilizes a layering technique.

Note that once the general condition of such technique is as taught by the prior art, it requires only a routine skill in the art to modify this known feature to fit a particular purpose. That means the user (or one skilled in the art) would use the teaching of the prior art for any desired purpose (e.g. for mixing hair colors or mixing any other paints).

Therefore, the Examiner concludes that the prior art has already taught or suggested Applicant's currently presented claimed limitations.

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(3) Applicant argues that Saita teaches displaying multiple images side-by-side with hair of different hair colors. Saita provides no reason to superimpose these multiple images to make a composite image as in Hamburg. Saita does not recognize any benefits or advantages to superimposing images with different hair colors or lead one to do that. . . Also Saita would not suggest providing two layers of Hamburg with different hair colors and superimposing them for any reason, because Saita assumes that the resulting hair color is displayed and is associated with a single hair coloring preparation.

- In response to argument (3), the Examiner respectfully disagrees. Even if Saita does not discuss the technique of superimposing, this does not necessarily lead one to positively conclude that Saita's invention does not recognize superimposing. Here, Saita appears to be silent regarding how the different hair color images are generated (i.e. Saita is silent whether a layering technique or some other technique is implemented to generate the images). The discussion of the reference appears to focus on simulating the different appearances of the subject's hair when dyed with different mixture of colors.

For example the line, "The present invention provides a hair color advice system comprising (i) an image memory means into which image data regarding the subject is input and stored, (ii) **a processing means** that finds the **hair area in the input image** of the subject and **builds a simulated image** in which **the color of the hair area is changed to any color**, and (iii) a monitor (display screen) on which the input image of the subject and/or the simulated image are displayed." (col.2, lines 4-11) teaches that the processor builds a simulated image of the desired hair color on the inputted image

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(original or first hair color) of the subject's hair. Here, the reference does not explicitly teach how this simulated image is built, that is it is silent whether the simulated image is built based on layering technique or some other color blending technique.

However, as already discussed above, Hamburg's reference is used to teach the technique of generating different mixture of colors on a computer by superimposing multiple layers.

(4) Applicant argues that Fertig teaches a somewhat more realistic method of simulating the results of dyeing hair with a single hair coloring preparation, . . . Fertig however does not explain how one skilled in the art would prepare or select a hair coloring preparation or reparations that would produce the color that the individual finds most suitable . . . Neither Saita nor Fertig suggests or discloses the two superimposed images with different hair colors as claimed in Applicant's new claim 6, because such superimposed images are not necessary in their simulation methods.

- In response to argument (4), the Examiner respectfully disagrees. Saita and Fertig are silent regarding superimposing layers of images to produce a composite layer. However, as already explained with respect to Saita, such lack of explicit description does not necessarily lead one to conclude that superimposed images are not necessary in the prior art (Saita and Fertig) simulation method.

However, as already presented in the previous office action, and also in this First action, Hamburg's reference is used to teach the implementation of layered images to produce a composite image by superimposing one layer over another. For example the line, " . . . The **color of each pixel** in the **image layer** is **combined** in with the color of

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the corresponding pixel in the accumulation buffer to **generate** a new **composited color**. This combination is controlled by the opacity of the layer pixel, layer_alpha, and the image layer transfer mode.” (col.5, lines 16-24) teaches the fact that the colors in each layer is combined to produce a composited color (i.e. superimposed image). Here, it is clear from the teaching of Hamburg that the composited color is the mixture of the different colors in the various layers.

Note that since Saita and Fertig are dealing with blending different colors using computer-generated images, one of ordinary skilled in the art would be motivated to modify the invention of Saita in view of Fertig by incorporating the layering technique taught by Hamburg since such layering technique is more efficient to blend two or more colors by inserting and removing any layer(s) until the desired color is generated. This saves the user significant amount of time because he/she can use a given layer multiple times to blend different colors.

(5) Applicant argues that Yoshio certainly does disclose an image processing method and apparatus for displaying color images of an individual on figures 5 and 6, who has head hair . . . But this combination does not provide any information regarding mixing of two dye preparations that produce different colors when applied individually to the hair. It only allows one to select the chose color efficiently. Yoshio does not disclose or suggest that the color buttons of fig. 6 or that the slider is associated with a mixture ratio of two coloring preparations or that respective transparencies of colors on superimposed layers are controlled to represent a mixture ratio of two actual hair

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coloring preparations. There is no discussion of adjusting or mixing anything but color hues in Yoshio . . .

- In response to argument (5), the Examiner respectfully disagrees. Yoshio suggests for example blending two colors for a given image by varying their concentration using a slider bar until the desired color is achieved. Note that adjusting the colors of a given computer generated image involves varying the blending or concentration levels of one or more of the colors in the image. Thus, as already taught by Yoshio, the user would vary the blending of the colors by moving the slider-bar (e.g. slider-bar 502 as shown in FIG 5) either up or down thereby varying the mixing ratio of the colors, while observing the blending result on the displayed image. Even though Applicant argued that the slider-bar of Yoshio is implemented to adjust brightness and contrast of the image, the slider-bars utilized for such function are different from for example slider-bar 502 which is implemented to adjust only the color of the image. The slider-bars utilized for adjusting brightness and contrast of the image are located below slider-bar 501 (not labeled).

Applicant further argued that there is no discussion of adjusting or mixing anything but color hues in Yoshio.

However, one of ordinary skill in the art would readily recognize the fact from the teaching of Yoshio that adjusting the colors using the slider-bars (e.g. slider bar 502) involves blending (i.e. mixing) the different colors since the resultant color produced is the result of the blending of the colors involved in the adjustment.

However, as already presented in this First Action, Alpher' reference is used to further illustrate the fact that selecting two colors and mixing the colors by determining the relative contributions from each of the respective base colors (i.e. according to the mixing ratio) is old and well known in the art (see *Claim Rejections - 35 USC § 103* above for detail).

(6) Applicant argues that when analyzing the relationship of a claimed invention to the disclosures in multiple prior art references care must be taken not read applicants' limitations from their independent claim into the prior art disclosures from the applicants' specification.

It is especially important to remember that the 35 U.S.C. 103 (a) requires that the source of the reason for combining the disclosures of the prior art references to arrive at the claimed invention cannot be the applicants' specification and that the references and the reason must have been apparent at the time the invention was made by the inventor, i.e. at least the application date . . . Furthermore the combined disclosures of the prior art references of record do not lead one skilled in the art to provide two layers with two different hair lines which are superimposed with the original hair color with a suitable transparency and then with the two layers with the colors produced by the individual hair coloring preparations . . .

- In response to argument (6), the Examiner respectfully disagrees. First of all, as it has already been presented in the previous office action (also in this First action), the motivation for combining Hamburg's reference is not from Applicant's specification as the Applicant attempted to imply in the above argument. In fact, Applicant's current

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specification does not provide any rationale as to why a layering technique for mixing colors (in computer-generated images) is more advantageous than other techniques in the art. Therefore, Applicant's argument that *the motivation for combining the references is obtained from Applicant's specification* is NOT persuasive.

Applicant further argued that Hamburg does not teach or lead one skilled in the art to superimpose layers comprising the images as claimed with the respective transparencies.

However, Hamburg clearly teaches superimposing layers that have different transparencies to produce a composite image. For example the line, "The **color of each pixel** in the **image layer** is **combined** in with **the color of the corresponding pixel** in the accumulation buffer to generate a new **composited color**. **This combination is controlled by** the opacity of the layer pixel, **layer_alpha**, and the image layer transfer mode . . . The **lerp_color** function performs this interpolation for each color channel in the image. In this implementation, **an alpha value of 0.0** represents **totally transparent**, whereas an **alpha value of 1.0** represents **fully opaque**." (see col.5, lines 16-24 and lines 47-50) teaches that the different layers that are going to be combined to form the superimposed image have alpha-values in the range of 0.0 to 1.0 where the alpha value represents the concentration. That means, the user would use any required number of layers each having their respective alpha-values (transparency values) so that he/she would generate a composite image of the desired color based on the layers' alpha-values.

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Therefore, the Examiner concludes that Applicant's currently presented claimed limitations have already been taught or suggested by the prior art.

Regarding Applicant's argument concerning the limitation of claim 10, Lei's reference is presented as already shown in the above section (*Claim Rejections - 35 USC § 103*) that teaches or suggests the claimed feature regarding displaying a three-dimensional hair image.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bruk A. Gebremichael whose telephone number is (571) 270-3079. The examiner can normally be reached on Monday to Friday (7:30AM-5:00PM) ALT. Friday OFF.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Xuan Thai can be reached on (571) 272-7147. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Bruk A Gebremichael/
Examiner, Art Unit 3715

/Cameron Saadat/
Primary Examiner, Art Unit 3715